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ABSTRACT

The need for more precise analysis of the complex educational and psychological processes which exist in special classes for the emotionally handicapped, is emphasized. A psycho-educational model, involving teacher-pupil interaction, is developed, and a procedure (the Interaction Analysis System) is formulated for observing and recording behavior. Although satisfactory inter-observer reliabilities in excess of .85 are reported, further reliability checks are recommended for specific future uses of the instrument. The results of a study in 15 emotionally-handicapped classrooms, using the Interaction Analysis System, indicate significant differences in both teacher and pupil behavior between clinic and public school classes. The interaction Analysis System is proposed as a feasible means of analyzing the variability of teacher and pupil behavior observed in classrooms for the emotionally handicapped and for use in further research of the process. Teacher and pupil behavior categories are included. (LR)

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FINK INTERACTION ANALYSIS SYSTEM

by

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Introduction

In recent years the special classroom has been assigned an increasingly larger role in meeting the needs of the emotionally handicapped. This has come about as a result of practical considerations which have made it imperative that the formal educational system come to grips with this major social-educational problem (Cowen, Gardner & Zax, 1967) and from the belief that solutions within an educational context have theoretical validity (Bower, 1961; Morse, 1966).

The development of the special class as a significant modality for educational treatment of the emotionally handicapped has, however, been marked by much theoretical diversity and operational confusion. Morse, Cutler & Fink (1964), in a national study of public school classes for the emotionally handicapped, found "an amazing lack of specific pattern and uniformity of approach (p. 130)." This study made clear the need for more precise analyses of the complex educational and psychological processes which obtain in special classes for the emotionally handicapped.

Theoretical Considerations

The direct observation of classroom behavior has been viewed, historically, as a vital technique for the understanding of the learning process (Medley & Mitzel, 1963). Many systems for the study of that behavior have been developed and have utilized diverse theoretical approaches. In most instances the role ascribed to teacher influence and its relationship to the ultimate learning outcome has been an important element. In the regular classroom the determination of these objectives has been conceived generally in terms of academic objectives. The role of the teacher in such a process is one of organizing the classroom technology in what may be considered a superior-subordinate role relationship and to guide pupils to that

objective. If some disputation might result in regard to the process by which the objectives may be best obtained, academic learning, despite the various other learnings which also are expected to occur, stands as a major objective, whether stated or implicit, of school attendance.

As one moves to the study of educational arrangements for the emotionally handicapped, the utility of the regular classroom instructional model as a basis for analysis becomes less apparent. The difficulties which arise are both of a theoretical and practical nature. If the problem is approached from a psycho-educational perspective, is it possible to conceive the learning outcome of the special class of the emotionally handicapped in terms similar to that of the regular class? What, for example, is the role of the special teacher in the "instructional process"? What is the nature of pupil participation? What are the appropriate events of the "instructional process"?

From a psycho-educational perspective, the objectives of the special classroom cannot be cast merely in cognitive or even in cognitive-affective terms (at least as customarily understood) and measured in relationship to academic-achievement outcomes. School experience, per se, is assigned a key role in the educational-treatment process. The character of that experience is not traditional, however, but is designed to improve the functional capacity of the child as well as meeting specific educational needs (Hirschberg, 1953). These objectives are attained through curriculum experiences that may appropriately be aimed at the "organism in all of its aspects and all of its interactions with the world (Rhodes, 1966, p. 22)." While the curriculum exerts an important influence upon the child it may be the "quality of the encounter", however, which ultimately determines its effect upon the child. Within the psycho-educational model the teacher

is seen as representing the essence of that encounter and a dominant influence in the exchange.

The role of the teacher is not exclusive, however. There is a mutuality between teacher and student which engenders a role in the latter beyond that which is typical in the normal classroom. It is a role, further, which is not so much imputed as developed through process. The interaction of teacher and pupil becomes a dynamic interchange which deals consciously and deliberately with those variegated aspects of the human process not encompassed nor which can be adequately conceptualized within a model limited to the cognitive experience or by practice which is constrained by traditional objectives. In the special class for the emotionally handicapped, there is, finally, a vital concern with pathological expression, and, at varying levels of intensity, its therapeutic management. It is this subtle but powerful process which permeates the special class and which represents its distinguishing feature. The intensive study of the special class for the emotionally handicapped by direct observation demands, thus, a method and procedure sensitive to those characteristics.

The basic assumptions of the Fink Interaction Analysis System are thus derived from the nature of the special class for the emotionally handicapped conceived within a psycho-educational framework. The assumptions are that in classes for the emotionally handicapped "meaningful" behaviors are: (1) verbal and non-verbal, (2) task and non-task, (3) teacher and pupil initiated.

The selection of specific categories and procedures also is influenced by other factors. These include: (1) work of previous investigators, (2) concepts derived from the psychological and educational literature, (3) judgment based upon extensive observation of teacher and pupil behavior

in classes for the emotionally handicapped, (4) field testing of a variety of observation systems.

Teacher Categories

The teacher categories are first dichotomized as to their task and non-task nature. Three task categories are defined. Each reflects a different process of involving students in task activities: unilateral direction giving, induced student participation and feedback.

Teacher non-task, or control categories, are viewed as having five dimensions. One is a covert response set, four are overt response sets. One additional category is reserved for "no interaction".

The covert response set comprises one category, "Planned Ignoring", which is viewed as a positive control technique. The first of the four overt response groups of categories is seen as a series of verbal control actions on an authoritative-interpretive continuum. Thus, at one extreme, the category "Authoritative" represents verbal interpretation that limits pupil participation. It represents teacher behavior that is commanding, rationalizing, critical. At the other extreme, the category "Causal" reflects verbal interaction which actively engages the student in the consideration and solution of a problem. Commonly this means the use of life-space interview techniques.

The second group of overt response categories is designed for behavior which involves physical or spatial manipulation of students or their surroundings. This includes exclusion of students from class, the use of "quiet rooms", internal physical or personal rearrangement of students in relation to each other or the teacher, or the teacher's own manipulations, such as words, smiles, gestures. Lower order incentives used for control of deviant behavior are tallied in the Reward and Punishment categories.

These statements can be explicit or implicit and oriented to the future or present. The fourth overt response group accounts for the use of task expectations or which refocuses upon the current task as a means of deviant behavior control.

Pupil Categories

Pupil non-task activities are considered along a number of dimensions These include, first, the non-aggressive acts contained within Self Involvement as well as generalized verbal and physical interaction. Aggressive acts are characterized in four ways: Verbal Aggression, Physical Aggression, Generalized Disturbing and Refusal/Resistive. Verbal and Physical Interaction and Aggression are further subdivided according to whether the behavior is directed towards Self, Peer, or Teacher.

Method of Observation

A major decision necessary in the formulation of procedures for observing and recording behavior concerns the nature of the observation to be recorded. Flanders (1965), for example, determines that only one behavior, that of teacher or pupil, is recorded at each interval. No pupil activity is assumed to be "recordable" while teacher statements are uttered, or conversely, while pupils talk no teacher activity is coded.

If, however, teacher-pupil interaction is the subject of investigation and if, in particular, it is determined that interaction behaviors are both verbal and non-verbal, would it not be necessary to take into account the fact that when teachers "behave" pupils also "behave"? Is there not really a continuous series of interactions between teachers and pupils? And if that is so, should not the coding and analystic system take that into account? Following extensive experimentation, it was concluded that if both a teacher and pupil behavior, that is, the behavior with which the teacher interacts, were recorded at each observation interval these requirements would be met satisfactorily.

Reliability

Following the development of the observation instrument and after extensive acclimatization and training in its use, inter-observer reliability tests were conducted. The method as derived by Scott (1955) and applied by Flanders (1965) was used in the computations. Reliability coefficients greater than .85 were obtained. While the reliabilities were considered satisfactory, further utilization of this instrument would warrant additional specific reliability checks.

Selected Results from Utilization of the System

The Fink Interaction Analysis System, prior to the minor modifications which have been included in the scale as it is described in this paper, was utilized in a study of 15 classrooms for the emotionally handicapped. The sample was at the elementary level and was drawn from clinic and public school settings in Southeastern Michigan.

Aggregate teacher activity was found to be almost equally divided between task and non-task behavior. The latter was quite variable with more than three-fourths of all control behavior encompassed by six categories: Planned Ignoring, Surface Behavior Response, Authoritative, Refocus on Task, Appeal to Value/Law, and Causal.

Forty percent of pupil behavior (that is, that behavior with which the teacher interacted was non-task, of which almost one-half was of a "verbal interactive" nature. This was directed almost equally to peers and teachers. One-fourth of all deviant behavior was accounted for by generally disruptive and resistive behavior. Physical and verbal acting-out was quite limited.

Comparison of overall interaction data between clinic and public school classes (in view of the small sample size, this and the comparisons

which follow should be interpreted with caution) indicated significant differences both in teacher and pupil behavior. Within the public schools there was greater pupil deviant behavior, particularly in aggressive and general acting-out forms. In response, public school teachers placed greatest reliance upon planned ignoring, humor and appeals to established values and rules. Within the clinic classes, teachers made greater use of pupil-centered approaches, such as life-space interviewing, in response to deviant behavior. Clinic teachers also utilized direct command methods of control more frequently than public school teachers.

Classrooms taught by female teachers were more disruptive. In response, female teachers made greater use of direct commands, appeals to established rules, and in-depth interview techniques. Male teachers made greater use of planned ignoring as a control technique.

Comparison of classrooms based upon teacher experience also indicated a number of important differences. In classes taught by less experienced teachers, deviancy appealed less frequently. These teachers also made greater use of direct command, surface and in-depth interview techniques than the more experienced teachers. The latter showed a preference for planned ignoring, humor, punishment and task manipulation as forms of control.

Illustrations of how the interaction data could be utilized to provide feedback to individual teachers were provided in selected analyses of individual teacher and pupil interactions. Also available was specific utilization of teacher control mechanisms in response to specific pupil behavior.

It is concluded that the interaction analysis system described in this paper is a feasible means of analyzing the variability of teacher and pupil behavior evident in classrooms for the emotionally handicapped and can serve to further research into that process.

		Teacher Categories
Learning Task (social and academic learning)		1. GIVING: task directions, clarification of task, communication of facts or concepts. 2. ASKING: teacher behavior directed at actively involving students in learning tasks, asking questions (not rhetorical questions) or asking for responses, either verbal or motoric. 3. FEEDBACK: any indication by the teacher of the correctness or incorrectness of responses.
Control Behavior	Covert Response	4. PLANNED IGNORING: deliberate ignoring of non-task behavior as a means of control; may require assumption by observer that teacher knows behavior is occurring and is being ignored. Note that planned ignoring may not necessarily result in extinction of behavior.
	Verbal Interpretive	5. AUTHORITATIVE: efforts to change behavior by using commands, criticism, verbal attack, rationalization. 6. CHANGE TONE: the use of humor, "joshing" and the like, to effect behavior change. 7. APPEAL TO VALUE/LAW: include here both appeals to values ("You guys know better than that.") as well as appeals to established rules ("Free time doesn't begin until eleven o'clock."). 8. SURFACE BEHAVIOR RESPONSE: deals with behavior at surface level; for example, "I know you guys have had a rough day, but let's get down to work." 9. CAUSAL: effort by teacher to get students to think about or understand the nature of behavior. This includes the use of life-space interview techniques.

Teacher Categories - Continued

Control Behavior - Continued	Manipulation of Space-Person		10. EXCLUSION: include here exclusions with or without force, using verbal or physical means. 11. INTERNAL REARRANGEMENT: regrouping of physical aspects of room (moving desks); having a student sit near teacher or work by himself; teacher establishing herself in a different part of the room. 12. VISUAL/GESTURAL: efforts at control by means of nods, smiles, stares, hand movements, etc.
	Manipulation of Incentive		13. REWARD: use of reward, future or present, and implied reward. 14. PUNISHMENT: use of punishment, future or present, and implied punishment.
		Manipulation of Task	15. MANIPULATION OF TASK: change, reduce or refocus on task.
			16. NO INTERACTION: teacher working at desk, for example.

Pupil Categories	
1. TASK:	include here all task oriented responses of the student (social or academic learning).
2. SELF INVOLVEMENT:	include here all behavior in which student stares into space, daydreams, and manipulates objects (playing with clothes, with self, chewing gum, playing with pencil in hand, etc.). No aggressive intent inferred.
3. VERBAL INTERACTION/SELF: 4. VERBAL INTERACTION/PEER: 5. VERBAL INTERACTION/TEACHER:	muttering to self, answers teacher when not supposed to, interrupts another student, talks out of turn, etc. Do not include working out loud. No aggressive intent inferred. Specify whether interaction is with self, peers, or teacher
6. PHYSICAL INTERACTION/SELF: 7. PHYSICAL INTERACTION/PEER: 8. PHYSICAL INTERACTION/TEACHER:	moves around in class; joins one or more peers in activity; puts his arm around teacher. No aggressive intent inferred. Specify whether with self (wandering), peers, with teacher.
9. VERBAL AGGRESSION/SELF: 10. VERBAL AGGRESSION/PEER: 11. VERBAL AGGRESSION/TEACHER:	insulting or abusive statements, swearing yelling, whistling. Specify whether to or by self, peers, or teacher.
12. PHYSICAL AGGRESSION/SELF: 13. PHYSICAL AGGRESSION/PEER: 14. PHYSICAL AGGRESSION/TEACHER:	overt physical attack, punching, kicking, hitting, spitting, throwing a book at someone. Specify whether to or by self, peers, or teacher.
15. GENERALIZED DISTURBING:	slamming a desk, clapping, whistling, rattling or tearing papers, tapping feet, if not an integral part of a task.
16. REFUSAL/RESISTIVE:	pupil resistance, ranging from whining, manipulative behavior to flat refusal.

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